



United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241



Contact Name: _____

Email Address or Fax Number: _____

Project Name & Location: _____

Date of Letter Request: _____

This is in response to your letter requesting threatened and endangered species information in regard to the proposed project listed above. These comments are provided pursuant to the Endangered Species Act (ESA, 87 Stat. 884, as amended; 16 U. S. C. 1531 *et seq.*).

Two federally listed species could occur in the project area, the endangered Indiana bat (*Myotis sodalis*), and the threatened northern long-eared bat (NLEB) (*M. septentrionalis*).

The Indiana bat and NLEB may use the project area for foraging and roosting between April 1 and November 15. Indiana bat summer foraging habitats are generally defined as riparian, bottomland, or upland forest, and old fields or pastures with scattered trees. Roosting/maternity habitat consists primarily of live or dead hardwood tree species which have exfoliating bark that provides space for bats to roost between the bark and the bole of the tree. Tree cavities, crevices, splits, or hollow portions of tree boles and limbs also provide roost sites. Similar to the Indiana bat, NLEB bat foraging habitat includes forested hillsides and ridges, and small ponds or streams. NLEB are typically associated with large tracts of mature, upland forests with more canopy cover than is preferred by Indiana bats. NLEB seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices, and this species is known to use a wider variety of roost types than the Indiana bat. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat has also been found rarely roosting in structures, like barns and sheds. In West Virginia, the Service considers all forest habitats containing trees greater than or equal to 3 inches in diameter at breast height (DBH) to be potentially suitable as summer roosting and foraging habitat for the Indiana and northern long-eared bat.

Indiana bats and NLEB use caves or mine portals for winter hibernation between November 15 and March 31. These species also use the hibernacula and the areas around them for fall-swarmling and spring-staging activity (August 15 to November 14 and April 1 to May 14, respectively). Some males have been known to stay close to the hibernacula during the summer and may use the hibernacula as a summer roosts. There may be other landscape features being used by NLEB during the winter that have yet to be documented. The federally endangered Virginia big-eared bat (*Corynorhinus townsendii virginianus*) may also use caves or mine portals during any time of the year.

Based on documented travel distances of Indiana bats, Indiana bats are most likely to use suitable habitat within 10 miles of a known priority 1 or 2 Indiana bat hibernaculum, 5 miles from a known priority 3 or 4

Indiana bat hibernaculum, or 2.5 miles from any known maternity roost, or 5 miles from summer detection site where no roosts were identified. Similarly, NLEB are most likely to use suitable habitat within 5 miles from a NLEB hibernaculum or 1.5 miles of a known NLEB maternity roost or 3 miles of a NLEB detection site with no roost identified area. Areas within these distances from documented locations are referred to as known use or buffer areas.

Project Review

The Service has evaluated the availability of suitable foraging and roosting habitats on the West Virginia landscape relative to the best estimate of the statewide population of Indiana bats. On that basis, we have determined projects affecting less than 17 acres of suitable forest habitat and that are not within any Indiana bat or NLEB buffer areas as described above, and will not affect any potential hibernacula, and that are completed before the end of the 2015 calendar year are very unlikely to result in direct or indirect impacts to these species. The effects of such projects are considered discountable and the projects, therefore, are not likely to adversely affect the Indiana bat or NLEB¹. However, the WVFO is currently reviewing existing data and available literature on the NLEB to determine how our recommendations should be modified to address the NLEB. **We expect that this 17 acre threshold may change on or before the end of the 2015 calendar year.** In the interim, our office will be using the threshold developed for the Indiana bat to make determinations regarding the NLEB. For more information on projects affecting less than 17 acres of suitable forest habitat, that occur outside of any Indiana bat and/or NLEB buffer areas, please refer to Appendix A.

This project does not fall within any of the Indiana bat or NLEB known use areas described above, and will remove more than 17 or more acres of potential Indiana bat or NLEB summer habitat as a result of the proposed action. As a result, the project proponent will need to develop project-specific surveys and avoidance measures to determine whether these species may be affected by the proposed action, as described below. The project proponent should determine the amount of suitable Indiana bat and NLEB summer habitat that will be removed from the proposed site, and determine whether any caves or mine portals that may be potential hibernacula are present or may be affected by the project.

To avoid liability under section 9 of the ESA, no project construction activities should occur in the proposed site until consultation with the Service is complete. It is important to note that “project” includes all project features, not just the portion of the project prompting the submittal of a permit application (*e.g.*, to WVDEP or the Corps). For example, a residential development would include all features of the development, including all forest or wooded areas to be affected or encroached upon by roads, utility lines, houses, driveways, septic areas, detention basins, stormwater basins, yards, lots, *etc.* An oil or gas project would include not only the well and well pad, but also the roads, staging areas, impoundments and holding pits, and oil and gas lines associated with the well or well field.

Summer Habitat Options

We recommend one of two options to avoid incidental take of the Indiana bat and NLEB as a result of loss of potential summer habitat. Please choose and complete either Option 1 or Option 2 below as your choice will be applicable for the duration of the proposed project. **Options may not be combined.**

These options are “guidance” and not policy, a project proponent has the option of not following the Guidance’s recommendations when providing information to the Service, however, this will likely increase review times or result in projects that will adversely affect Indiana bats or NLEB and, therefore, require formal consultation.

¹ Different recommendations and analyses are applied to wind projects due to the differences in types of effects that may occur.

Option 1:

This option presumes that Indiana bats and NLEB are present at the proposed site and sufficient avoidance and minimization measures must be developed and implemented to avoid incidental take. A conservation plan for the Indiana bat and NLEB should be developed. At a minimum, this plan must include a commitment that all tree removal operations will be conducted between November 15 and March 31, when Indiana bats and NLEB are in hibernation.

Prior to developing a conservation plan, a detailed on-site habitat assessment of the amount and quality of potential Indiana bat and NLEB summer foraging and roosting habitat that would be cleared by the project should be conducted to ensure that Indiana bats and NLEB present in the area will not be affected by loss of habitat. After this assessment is conducted, measures to avoid and minimize impacts to Indiana bat and NLEB summer foraging and roosting habitat should be developed. A Myotis Bat Conservation Plan should then be developed to avoid and minimize adverse impacts to bats. Information on how to develop this plan is available in our Guidance on Developing and Implementing a Myotis Bat Conservation Plan and its associated appendices. This plan and the on-site habitat evaluation should be developed by someone who has experience with Indiana bat and NLEB habitat requirements such as those listed in the List of Surveyors Qualified to Conduct Myotis Bat Surveys in West Virginia.

In addition, the conservation plan should include an evaluation calculating the percentage of potential Indiana bat and NLEB summer foraging and roosting habitat that would remain after project construction. For non-linear projects, this habitat evaluation should be done for the area within a 2-mile radius around the center point of the proposed disturbance. Please be sure to determine the 2-mile radius from the center of the proposed project area rather than from the project boundary. For linear projects like roads, oil and gas pipelines, or electric transmission lines, the habitat evaluation should be done for the area within ¼ -mile on each side of the proposed right-of-way for the entire length of the project. Please calculate the number of acres of forested habitat and non-forested habitat within the appropriate analysis area both prior to and after project construction.

The results of the habitat evaluations and the proposed conservation plan should be submitted for our review prior to commencement of the project. If we determine that the extent of disturbance is not significant enough to adversely affect the Indiana bat or NLEB, the project may proceed with seasonal restrictions on tree removal and commitments made for avoidance and minimization of project impacts on suitable bat habitat. Seasonal restriction on tree removal will apply for the life of the project.

If we determine that the extent of disturbance may affect, and is likely to adversely affect the Indiana bat or NLEB, a survey may be necessary to determine if these species are present, or additional conservation measures may be required. For further information, please see Option 2.

Option 2:

Surveys are conducted to determine if the summer foraging and roosting habitats within the proposed site are occupied by the Indiana bat or NLEB. The enclosed Range-wide Indiana Bat Summer Survey Guidelines should be followed. These Guidelines are considered acceptable to address both the Indiana bat and NLEB. To avoid insufficient or inadequate surveys, a survey plan for the proposed site should be submitted to us for concurrence prior to conducting the survey. Acoustic surveys may be conducted between May 15 and August 15, and mist-net surveys may be conducted between June 1 and August 15. The surveys should be conducted by a qualified bat biologist with experience in identifying Indiana bats and NLEB and who holds a current, valid collection permit from the West Virginia Division of Natural Resources (WVDNR). The WVDNR may be contacted at the Elkins Operation Center, P.O. Box 67, Ward Road, Elkins, West Virginia, 26241; phone (304) 637-0245. A List of Surveyors Qualified to Conduct Myotis Bat Surveys in West Virginia is also enclosed.

The survey results should be provided to the Service's West Virginia Field Office for review and concurrence. If no endangered bats are detected and we agree with the survey findings, tree removal can proceed at any time of year. If endangered bats are detected, the West Virginia Field Office and the WVDNR should be notified the next business day². We will then work with the project proponent to minimize the possibility of impacts to Indiana bats. The Guidance on Developing and Implementing an Myotis Bat Conservation Plan may be used to help develop measures to minimize impacts when Indiana bats and NLEB are captured.

Surveys are considered current for five years consisting of the summer they are done and the following four summer seasons. Surveys should be repeated for any tree removal occurring after this 5-year period.

Winter Habitat: Caves and Mine Portals

Regardless of which summer habitat option is chosen from above, the presence of caves and mine portals, and their use by federally listed bats, must also be addressed.

Therefore, the following step-wise process should be followed in order to determine if any caves or abandoned mine portals in the proposed project area are used by endangered bats. It should be noted that impacts to caves or mine portals that are used by endangered bat species may result in violation of section 9 of the ESA. Caves may also contain other sensitive species, and activities that may affect cave passages and openings should generally be avoided to the maximum extent practicable. Also note that the criteria and forms listed below may be modified as new information on bats and mines in West Virginia is obtained.

The proposed site should be surveyed for caves and mine portals. This survey can be performed by mining engineers, other field personnel, or biologists with experience identifying caves or mines. The survey should include a review of topographic, mining, karst occurrence, and environmental resources information maps; as well as actual field reviews of the entire proposed project area. For linear projects (e.g., transmission lines, natural gas pipelines, highways, and access roads), the field survey should include lands buffering the disturbance footprint of the proposed linear project, extending to 0.6 mile (1 km) on each side of the outer edges of the footprint.

Any caves and portals found should be evaluated for characteristics that may indicate potential use by bats. A Phase I Cave/Mine Portal Survey Data Sheet should be completed for each opening found. This data sheet is enclosed and results should be compared against the criteria listed in the Draft Protocol for Assessing Abandoned Mines/Caves for Bat Use. The data obtained from the survey should be provided to us for review prior to implementation of any activities that may impact caves or portals.

Any caves and portals determined not to exhibit potential habitat for bats, based upon the criteria referenced above, will not require any further assessments for the presence of federally listed bat species. If caves and/or portals at the proposed site appear to have suitable bat habitat characteristics, mist net surveys or trapping may be recommended. Guidelines for conducting these surveys are provided in the Draft Protocol for Assessing Abandoned Mines/Caves for Bat Use. However, due to concerns about the potential for mist netting and trapping at caves or portals to exacerbate the spread of white nose syndrome, please contact this office for the most current recommendations and protocols prior to conducting these activities. The results of any surveys should be provided to this office for review and concurrence prior to proceeding with any activities that may impact caves or portals. If federally listed

² Surveys should not stop if a listed bat is captured or detected.

bats are found using caves or portals in the project area, further consultation will be necessary.

To facilitate consultation pursuant to the ESA, please provide to us all the following information at one time and prior to implementation of any project construction activities including tree removal or other activities that may impact caves or mine portals:

- 1) data pertaining to either Option 1 or Option 2 (options may not be combined); and
- 2) information on whether there are caves or old mine portals at the proposed project site, as well as the results of all surveys conducted to determine whether these openings exhibit potential bat habitat.

Any Federal permits required by this project should not be issued until we provide a letter stating that consultation is concluded. We cannot prepare a response unless sufficient information under 1 and 2 above is provided.

If you have any questions regarding these comments, please contact the biologist listed below at (304) 636-6586 or at the letterhead address.

Biologist Date: _____

John Schmidt, Field Supervisor Date: _____

Enclosures (4)

Appendix A:
Small Projects that Occur Outside of Indiana bat and/or NLEB Known Use Areas

The Service has evaluated the availability of suitable foraging and roosting habitats on the West Virginia landscape relative to the best estimate of the statewide population of Indiana bats. On that basis, we have determined that projects affecting less than 17 acres of suitable forest habitat and that occur more than 10 miles from a known priority 1 or 2 Indiana bat hibernaculum, more than 5 miles from a known priority 3 or 4 Indiana bat hibernaculum, or more than 2.5 miles from any known maternity roost, or more than 5 miles from summer capture sites where no roosts were identified, and will not affect any potential hibernacula, are very unlikely to result in direct or indirect impacts to the Indiana bat. The effects of such projects are considered discountable and the projects, therefore, are not likely to adversely affect the Indiana bat³.

This 17 acre threshold was developed based on information specific to the Indiana bat in West Virginia. While there are many similarities between the Indiana bat and the NLEB, the distribution and abundance of NLEB in West Virginia is much different than the Indiana bat and there are a number of factors that make the NLEB different from the Indiana bat in regard to whether they are likely to be adversely affected by these types of activities. The WVFO is currently reviewing existing data and available literature on the NLEB to determine how our recommendations should be modified to address the NLEB. We anticipate that additional information may become available as the Service accepts public comments and works to finalize the 4(d) rule for the species. **We expect that this 17 acre threshold may change** in the near future and our intent is to make modifications to our recommendations concurrent with the anticipated completion of the final 4(d) rule **on or before the end of the 2015 calendar year**. In the interim, our office will be using the threshold developed for the Indiana bat to make determinations regarding the NLEB.

Because the distance that NLEB typically travel between foraging and roosting sites and hibernacula are different from the Indiana bat, we are using species-specific distances around known NLEB captures, maternity, and hibernacula sites. Therefore, small projects **completed before the end of the 2015 calendar year** that are more than 5 miles from a NLEB hibernaculum or 1.5 miles of a known NLEB maternity roost or 3 miles of a NLEB capture site with no roost identified, that affect less than 17 acres of suitable forested habitat, and will not affect any potential hibernacula, will also be considered to have discountable effects on the NLEB.

If, however, the proposed project, or a portion thereof, will occur within any of the Indiana bat or NLEB buffer areas described above, or may affect any potential hibernacula, the 17-acre threshold described above does not apply. Under these circumstances, additional coordination with the Service's West Virginia Field Office is required. Project-specific surveys or avoidance measures will need to be developed and reviewed for projects of any size that are proposed within these buffer areas prior to implementation of the proposed action.

Projects that occur outside of any of the Indiana bat or NLEB buffers described above and that affect 17 acres or more of potential Indiana bat or NLEB summer habitat, or that may affect potential hibernacula will also need to develop project-specific surveys or avoidance measures. Projects in these areas have the option of assuming presence of the species, or conducting surveys to determine presence/absence.

³ Different recommendations and analyses are applied to wind projects due to the differences in types of effects that may occur.